

What is claimed is:

1. An optical disc comprising:

first and second recording layers on which data are recordable and/or reproducible, the first and second recording layers having a same track spiral direction, wherein, on the first recording layer, a physical address of smallest recording units increases or decreases together with an address of the smallest recording units recorded while recording on the disc, from an inner radius of the first recording layer to an outer radius of the first recording layer.

2. The optical disc of claim 1, wherein, on the second recording layer, the physical address increases or decreases together with the recorded address from an inner radius of the second recording layer to an outer radius of the second recording layer.

3. The optical disc of claim 1, wherein, on the second recording layer, the recorded address decreases as the physical address increases and increases as the physical address decreases, from an inner radius of the second recording layer to an outer radius of the second recording layer.

4. The optical disc of claim 1, wherein the physical address is recorded in a form of pits at a front portion of each smallest recording unit.

5. The optical disc of claim 1, wherein the physical address is recorded on a track in the form of a wobble.

6. An optical disc comprising:

first and second recording layers on which data are recordable and/or reproducible, the first and second recording layers having the same track spiral direction, wherein, on the first recording layer, an address of smallest recording units recorded while recording the disc decreases as a physical address of the smallest recording units increases and increases as the physical address decreases, from an inner radius of the first recording layer to an outer radius of the first recording layer.

7. The optical disc of claim 6, wherein, on the second recording layer, the physical address increases or decreases together with the recorded address from an inner radius of the second recording layer to an outer radius of the second recording layer.

8. The optical disc of claim 7, wherein the physical address is recorded in a form of pits at the front of each smallest recording unit.

9. The optical disc of claim 7, wherein the physical address is recorded on a track in a form of a wobble.

10. The optical disc of claim 6, wherein, on the second recording layer, the recorded address decreases as the physical address increases and increases as the physical address decreases, from an inner radius of the second recording layer to an outer radius of the second recording layer.

11. The optical disc of claim 10, wherein the physical address is recorded in a form of pits at the front of each smallest recording unit.

12. The optical disc of claim 10, wherein the physical address is recorded on a track in a form of a wobble.

13. The optical disc of claim 6, wherein the physical address is recorded in a form of pits at a front portion of each smallest recording unit.

14. The optical disc of claim 6, wherein the physical address is recorded on a track in a form of a wobble.

15. An optical disc comprising:  
first and second recording layers on which data are recordable and/or reproducible, the first and second recording layers having opposite track spiral directions, wherein a physical address of smallest recording units increases or decreases together with an address of the smallest recording units recorded during recording on the disc.

16. The optical disc of claim 15, wherein the physical address increases or decreases together with the recorded address on the second recording layer.

17. The optical disc of claim 15, wherein the recorded address decreases as the physical address increases and increases as the physical address decreases on the second recording layer.

18. The optical disc of claim 15, wherein:

on the first recording layer, the physical address and the recorded address increase or decrease from an inner radius of the first recording layer to an outer radius of the first recording layer; and

on the second recording layer, the physical address and the recorded address increase or decrease from an outer radius of the second recording layer to an inner radius of the second recording layer.

19. The optical disc of claim 15, wherein:

on the first recording layer, the physical address and the recorded address increase or decrease from an outer radius of the first recording layer to an inner radius of the first recording layer; and

on the second recording layer, the physical address and the recorded address increase or decrease from an inner radius of the second recording layer to an outer radius of the second recording layer.

20. An optical disc comprising:

first and second recording layers on which data are recordable and/or reproducible, the first and second recording layers having opposite track spiral directions, wherein:

on the first recording layer, an address of smallest recording units recorded while recording data on the disc decreases as a physical address of the smallest recording units increases and increases as the physical address decreases.

21. The optical disc of claim 20, wherein:

on the second recording layer, the physical address increases or decreases together with the recorded address.

22. The optical disc of claim 20, wherein:

on the second recording layer, the recorded address decreases as the physical address increases and increases as the physical address decreases.

23. The optical disc of claim 20, wherein:

on the first recording layer, the physical address and the recorded address increase or decrease from an inner radius of the first recording layer to an outer radius of the first recording layer, and

on the second recording layer, the physical address and the recorded address

increase or decrease from an outer radius of the second recording layer to an inner radius of the second recording layer.

24. The optical disc of claim 20, wherein:

on the first recording layer, the physical address and the recorded address increase or decrease from an outer radius of the first recording layer to an inner radius of the first recording layer, and

on the second recording layer, the physical address and the recorded address increase or decrease from an inner radius of the second recording layer to an outer radius of the second recording layer.

25. A method of identifying a recording layer on an optical disc comprising first and second recording layers on which data are recordable and/or reproducible, the first and second recording layers having a same track spiral direction, the method comprising:

assigning first smallest recording units on the first recording layer a physical address which is different from a physical address of second smallest recording units on the second recording layer.

26. The method of claim 25, wherein the physical address is recorded in a form of pits at a front portion of each smallest recording unit.

27. The method of claim 25, wherein the physical address is recorded on a track in a form of a wobble.

28. An optical disc comprising two or more recording layers on which data are recordable and/or reproducible, wherein a physical address of smallest recording units and an address of the smallest recording units recorded during recording data on the disc increase or decrease on the two or more recording layers.

29. The optical disc of claim 28, wherein the physical address and the recorded address increase or decrease in different ways for each of the two or more recording layers.

30. The optical disc of claim 28, wherein the two or more recording layers have the same track spiral direction.

31. The optical disc of claim 28, wherein the two or more recording layers

alternately have opposite track spiral directions.

32. A method of recording data on an optical disc having first and second recording layers on which data are recordable and/or reproducible, the method comprising:  
recording addresses in respective front portions of smallest recording units of the first and second recording layers wherein:

the recorded addresses and corresponding physical addresses of the first recording layer vary together according to a direction of travel on the disc; and

the recorded addresses and corresponding physical addresses of the second recording layer vary together according to the direction of travel.

33. The method of claim 32, wherein:

the recorded and physical addresses of the first recording layer and the recorded and physical addresses of the second recording layer all increase or all decrease together.

34. The method of claim 32, wherein:

the recorded and physical addresses of the first recording layer increase together;

and

the recorded and physical addresses of the second recording layer decrease together.

35. The method of claim 32, wherein:

the recorded and physical addresses of the first recording layer decrease together;

and

the recorded and physical addresses of the second recording layer increase together.

36. A method of recording data on an optical disc having first and second recording layers on which data are recordable and/or reproducible by a recording head, the method comprising:

recording addresses in respective front portions of smallest recording units of the first and second recording layers wherein:

the recorded addresses and the physical addresses of one of the first and second recording layers vary according to a direction of travel along the disc, and

the recorded addresses and the physical addresses of the other of the first and second recording layers vary oppositely according to the direction of travel.

37. The method of claim 36, wherein:  
the recorded and physical addresses of the first recording layer vary together, and  
the recorded and physical addresses of the second recording layer vary oppositely.

38. The method of claim 36, wherein:  
the recorded and physical addresses of the second recording layer vary together,  
and  
the recorded and physical addresses of the first recording layer vary oppositely.

39. A method of recording data on an optical disc having first and second recording layers on which data are recordable and/or reproducible, the method comprising:  
recording addresses in respective front portions of smallest recording units of the first and second recording layers wherein:  
the recorded addresses and the physical addresses of one of the first and second recording layers vary oppositely according to a direction of travel along the disc, and  
the recorded addresses and the physical addresses of the other of the first and second recording layers vary oppositely according to the direction of travel along the disc.

40. The method of claim 32, wherein the first and second recording layers have a same track spiral direction.

41. The method of claim 36, wherein the first and second recording layers have a same track spiral direction.

42. The method of claim 39, wherein the first and second recording layers have a same track spiral direction.

43. The method of claim 32, wherein the first and second recording layers have an opposite track spiral direction.

44. The method of claim 36, wherein the first and second recording layers have an opposite track spiral direction.

45. The method of claim 39, wherein the first and second recording layers have an opposite track spiral direction.